

Work Order ID 131399

Monday, January 18, 2016 3:30:24 PM

131399

Page 1

Item ID: D4466-042

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Upper Door Assembly, RH

Start Date: 4/8/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 4/17/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: mf Date: 12-1-18 Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4466	D

100	Pick Kit	0.00							
-----	----------	------	--	--	--	--	--	--	--

100

Packaging Memo

Packaging

DAS
36
9-89

JAN 26 2016

110		0.00							
-----	--	------	--	--	--	--	--	--	--

110

Small Fab Memo

Small Fab Transfer drill hole thru skin as per dwg (see note 10)

DAS
36
9-89

JAN 26 2016

Dimple for c'sunk rivets.(see note 11-12)

Assemble as per dwg and install rivet wet using proseal (see note 8)

Seal gaps with proseal as per dwg (see note 9)

Proseal 890 B-2 Batch: 133074

Prime 132910

Tempo Grey

DAS
41
9-89

15-11-20

Work Order ID 131399

Monday, January 18, 2016 3:30:24 PM

131399

Page 2

Item ID: D4466-042 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Upper Door Assembly, RH
 Start Date: 4/8/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 4/17/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC5- Inspect part completeness to step on W/O	0.00							DAS
120									9
QC	Memo	0.00							9-89
Quality Control									
130	Identify as per dwg & Stock Location: <u>W/O</u>	0.00							
130									
Packaging	Memo	0.00							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

MCS MAR 02 2016

Picklist Print

Monday, January 18, 2016 3:31:25 PM

Page 1

Work Order ID: 131399

131399

Parent Item: D4466-042

D4466-042

Parent Item Name: Upper Door Assembly, RH

Start Date: 4/8/2015

Required Date: 4/17/2015

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:D 12.12.03 per dwg revC DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4474-3 *D4474-3* Splice Block		Manufactured	No			100	Each	10.0000	6	6			DAS 36 9-89
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				ST100	99109			10	B95312	(6)		16/01/14	
								10					
D4496-042 *D4496-042* Upper Door Channel Assembly, RH		Manufactured	No			100	Each	3.0000	1	1			DAS 36 9-89
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				ST228	114010			3				16/01/14	
								3					
D4499-2 *D4499-2* Upper Door Channel, RH		Manufactured	No			100	Each	1.0000	1	1			DAS 36 9-89
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				ST228	114011			1	B			16/01/14	
								1					
D4500-2 *D4500-2* Bell Door Header, RH		Manufactured	No			100	Each	2.0000	1	1			DAS 36 9-89
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				ST229	130810			2				16/01/14	
								2					
D4501-042 *D4501-042* Upper Door Corner Assembly, RH		Manufactured	No			100	Each	0.0000	1	1			DAS 36 9-89
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
								2				16/01/14	
								2					

B95472

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____							
Misidentified ☐	☐ Past Due								

Picklist Print

Monday, January 18, 2016 3:31:25 PM

Page 2

Work Order ID: 131399

131399

Parent Item: D4466-042

D4466-042

Parent Item Name: Upper Door Assembly, RH

Start Date: 4/8/2015

Required Date: 4/17/2015

Start Qty: 1.00

Required Qty: 1.00

D4503-1 Manufactured No

100 Each 2.0000 1 1

D4503-1

Upper Door Skin

**

DAS
36
9-89

16/01/14

Location

Loc Qty

Loc Code

GA

1

133771

1

prelim

1

133028

1

D4570-4 Manufactured No

100 Each 4.0000 1 1

D4570-4

Bracket, RH

**

DAS
36
9-89

16/01/14

Location

Loc Qty

Loc Code

ST110

4

114013

4

MS20426AD4-3 Purchased No

100 Each 2,696.000 39 39

MS20426AD4-3

Rivet

**

DAS
36
9-89

16/01/14

Location

Loc Qty

Loc Code

GA

1176

113064

176

m125807

1000

ST312

1520

m125807

1520

MS20426AD3-4 Purchased No

100 Each 2,922.000 20 20

MS20426AD3-4

RIVET

**

DAS
36
9-89

16/01/14

Location

Loc Qty

Loc Code

GA

2811

m131697

2811

ST312

111

m127432

111

Monday, January 18, 2016 3:31:25 PM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
☐ OTHER : _____					

Picklist Print

Monday, January 18, 2016 3:31:25 PM

Page 3

Work Order ID: 131399

Parent Item: D4466-042

Parent Item Name: Upper Door Assembly, RH

131399

D4466-042

Start Date: 4/8/2015

Required Date: 4/17/2015

Start Qty: 1.00

Required Qty: 1.00

MS20426AD3-5

Purchased

No

100

Each

4,837.000

16

16

MS20426AD3-5

Rivet

16/03/01

DAS
36
9.89

Location

Loc Qty

Loc Code

GA

4164

4533

4164

ST312

673

4444

673

MS20426AD4-5

Purchased

No

100

Each

2,122.000

26

26

MS20426AD4-5

RIVET

16/03/01

DAS
36
9.89

Location

Loc Qty

Loc Code

GA

1522

m133751

1522

ST312

600

m133751

600

MS20470AD4-3

Purchased

No

100

Each

1,350.000

42

42

MS20470AD4-3

Rivet - Universal Head

DAS
36
9.89

Location

Loc Qty

Loc Code

GA

783

2193

783

ST310

567

2193

567

Monday, January 18, 2016 3:31:25 PM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____							
Misidentified ☐	☐ Past Due								

Picklist Print

Monday, January 18, 2016 3:31:25 PM

Page 4

Work Order ID: 131399

Parent Item: D4466-042

Parent Item Name: Upper Door Assembly, RH

131399

D4466-042

Start Date: 4/8/2015

Required Date: 4/17/2015

Start Qty: 1.00

Required Qty: 1.00

adjustment
MS20470AD4-4
Rivet, Universal Head

Purchased No

100 Each 2,824.000 6 6

16/03/01
DAS
36
9-89

Location	Loc Qty	Loc Code
CCK004	2069	
M133922	2069	M131800
GA	262	
M132536	8	
M133077	3	
M133284	251	
ST310	493	
118614	13	
M132803	480	

Ⓢ + 42

MS20470AD4-5

Purchased No

100 Each 1,466.000 53 53

16/03/01
DAS
36
9-89

MS20470AD4-5
RIVET, UNIVERSAL HEAD

Location	Loc Qty	Loc Code
GA	1012	
m133860	1012	
ST310	454	
m133860	454	

53

MS20470AD4-7

Purchased No

100 Each 1,159.000 24 24

16/03/01
DAS
36
9-89

adjustment
MS20470AD4-7
Rivet, Universal Head

Location	Loc Qty	Loc Code
ST310	1159	M123525
m132536	1159	

Ⓢ 24

Monday, January 18, 2016 3:31:26 PM

Shop Packet Print

Page 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			

Root Cause	FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐				

Picklist Print

Monday, January 18, 2016 3:31:26 PM

Page 5

Work Order ID: 131399

131399

Parent Item: D4466-042

D4466-042

Parent Item Name: Upper Door Assembly, RH

Start Date: 4/8/2015

Required Date: 4/17/2015

Start Qty: 1.00

Required Qty: 1.00

MS21059L3

Purchased

No

100

Each

166.0000

8

8

MS21059L3

Nut Plate

16/03/01

DAS
36
9-89

Location

Loc Qty

Loc Code

CA

13

M129682

13

ST301

122

M133363

72

M133990

50

ST303

31

M131616

5

M133016

26

MS21059L3K

Purchased

No

100

Each

512.0000

10

10

MS21059L3K

Nutplate

16/03/01

DAS
36
9-89

Location

Loc Qty

Loc Code

GA

160

m127635

160

ST300

352

m131677

352

DQA: _____ Date: _____



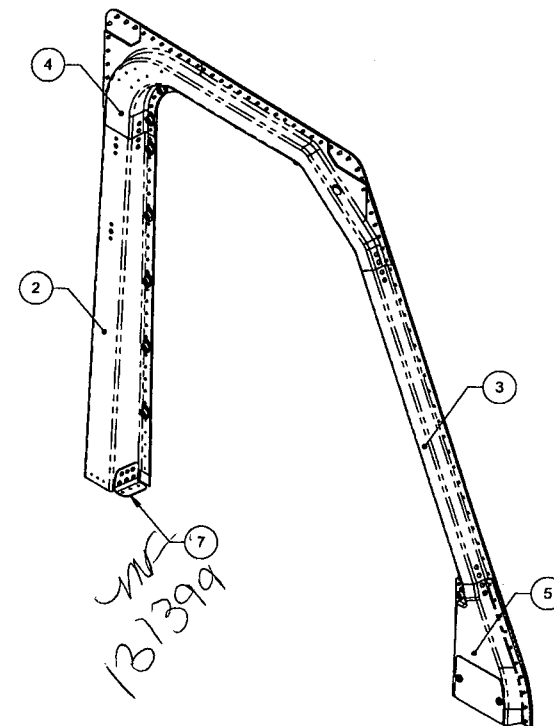
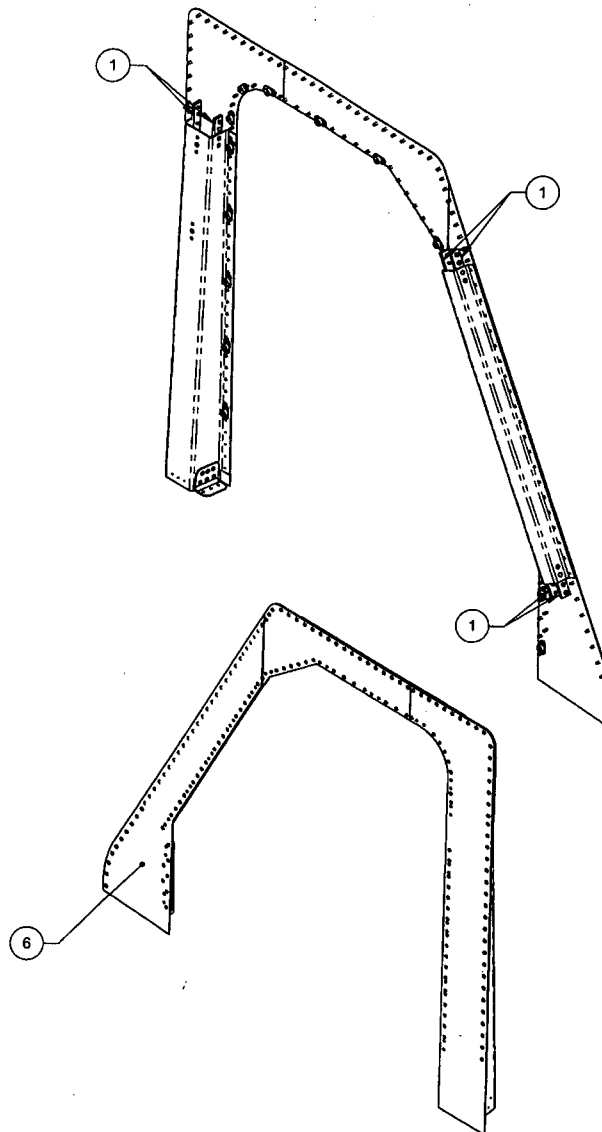
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4466-041	UPPER DOOR ASSY (LH)
1	6	D4474-3	SPLICE BLOCK
2	1	D4496-041	UPPER DOOR CHANNEL ASSY (LH)
3	1	D4499-1	UPPER DOOR CHANNEL (LH)
4	1	D4500-1	BELL DOOR HEADER (LH)
5	1	D4501-041	UPPER DOOR CORNER ASSY (LH)
6	1	D4503-1	UPPER DOOR SKIN
7	1	D4570-3	BRACKET (LH)
8	20	MS20426AD3-4	RIVET, CSK
9	16	MS20426AD3-5	RIVET, CSK
10	39	MS20426AD4-3	RIVET, CSK
11	26	MS20426AD4-5	RIVET, CSK
12	42	MS20470AD4-3	RIVET, PAN HEAD
13	6	MS20470AD4-4	RIVET, PAN HEAD
14	53	MS20470AD4-5	RIVET, PAN HEAD
15	24	MS20470AD4-7	RIVET, PAN HEAD
16	8	MS21059L3	NUTPLATE
17	10	MS21059L3K	NUTPLATE



NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 4.92 lbs
- 8) INSTALL ALL RIVETS WET USING PROSEAL 890 B-2 (PRC)
- 9) SEAL ALL GAPS ON MATING PARTS USING PROSEAL 890 B-2 (PRC)
- 10) ALL RIVET HOLES TO BE TRANSFER DRILLED THRU SKIN (ITEM 6):
FOR $\phi 0.125$ RIVETS DRILL $\phi 0.129$
FOR $\phi 0.094$ RIVETS DRILL $\phi 0.098$
- 11) DIMPLE FOR COUNTERSUNK RIVETS:
FOR $\phi 0.125$ RIVETS DIMPLE $\phi 0.225 \times 100^\circ$
FOR $\phi 0.094$ RIVETS DIMPLE $\phi 0.179 \times 100^\circ$
- 12) THESE RIVETS OMITTED TO ALLOW ACCESS TO THE UNDERLYING STRUCTURE, INSTALL AT NEXT ASSEMBLY.

D4466-041 UPPER DOOR ASSY (LH)

RELEASED
2013-01-10

D	ADDED DETAIL VIEW S & T FOR NEW CONFIGURATION OF HEADER. FOR FURTHER DETAILS SEE D4500.	AJS	12.12.03
C	ADDED -042 (RH) CONFIGURATION	AJS	12.10.02
B	COMPLETE REDESIGN. SEE REV A FOR DETAILS.	AJS	12.09.10
A	NEW ISSUE	AJS	12.02.29
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	AJS	DRAWING NO.	REV. D
MFG. APPR.	AJS	D4466	SHEET 1 OF 6
APPROVED	AJS	TITLE	SCALE
DE APPR.	AJS	UPPER DOOR ASSY	NTS
DATE	12.12.03	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DQA: _____ Date: _____



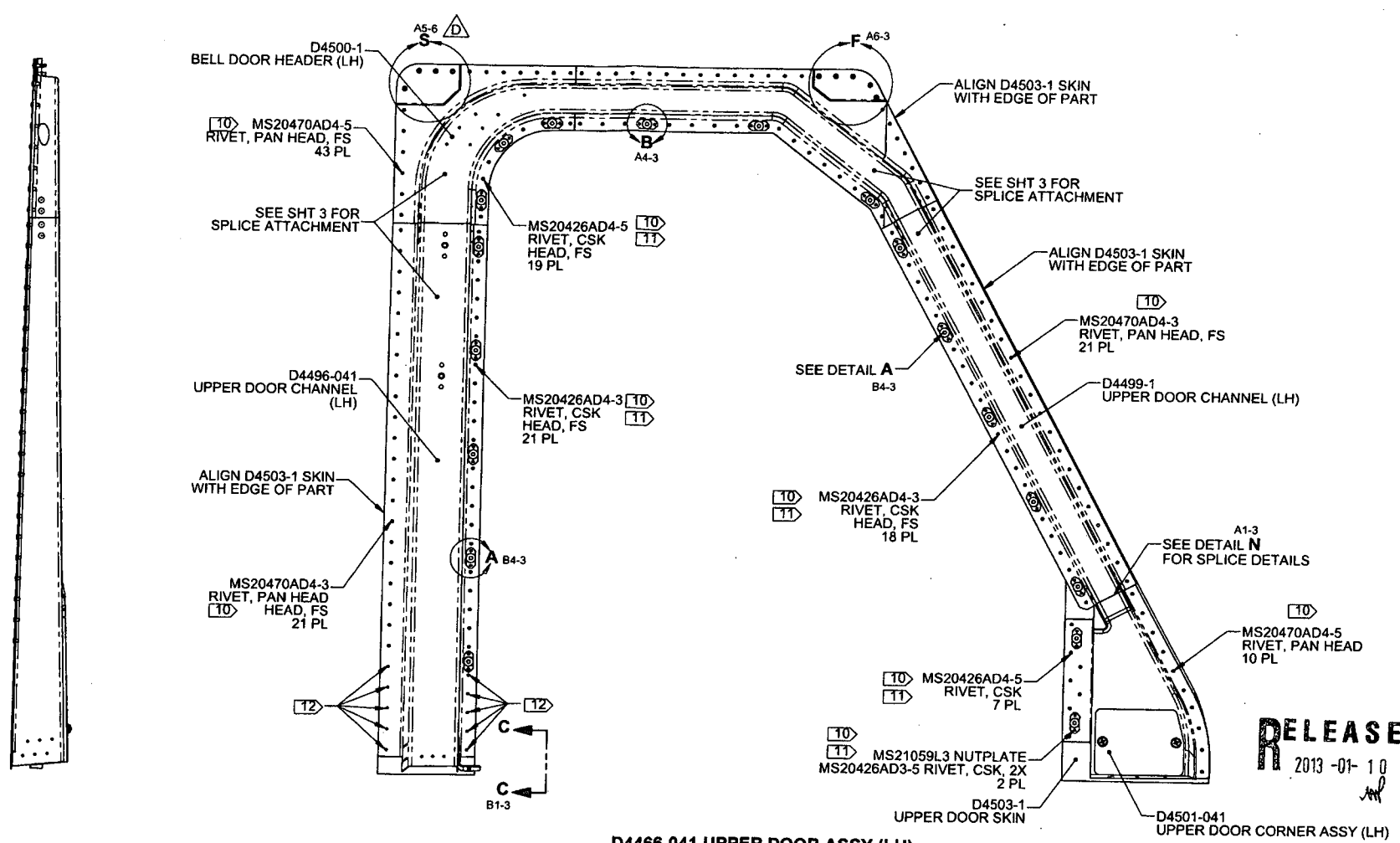
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong	
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions	
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance	
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect	
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing	
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved	
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing	
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish	
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread	
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence	
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____				
Misidentified ☐	☐ Past Due					



D4466-041 UPPER DOOR ASSY (LH)

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	A.P.	DRAWING NO.	REV. D
MFG. APPR.	N.D.	D4466	SHEET 2 OF 6
APPROVED	N.D.	TITLE	SCALE
DE APPR.	N.D.	UPPER DOOR ASSY	NTS
DATE	12.12.03	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED
2013-01-10

DQA: _____ Date: _____

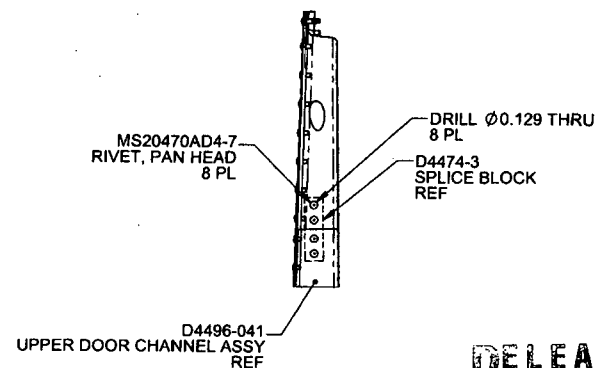
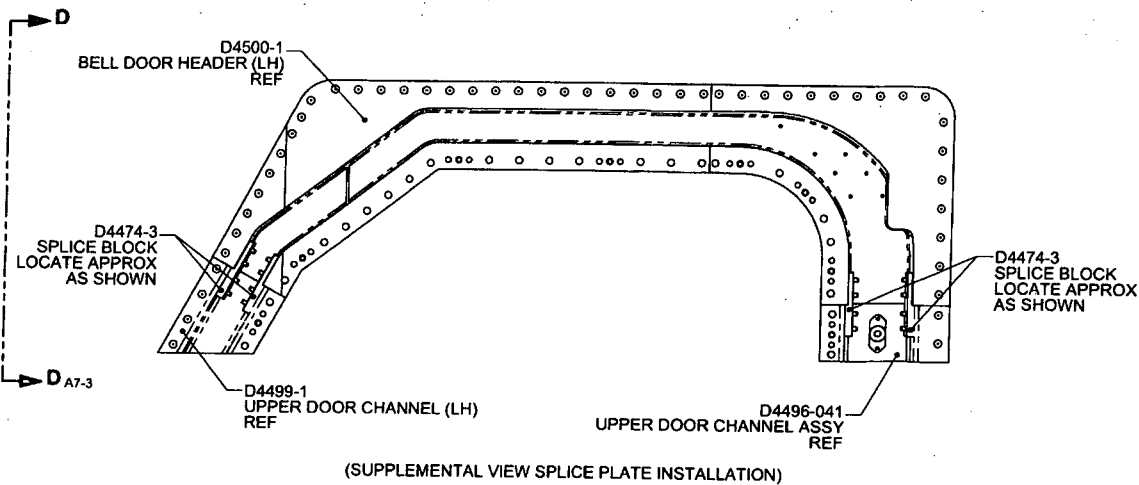


WORK ORDER NON-CONFORMANCE / UPDATE

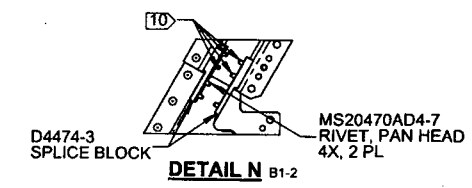
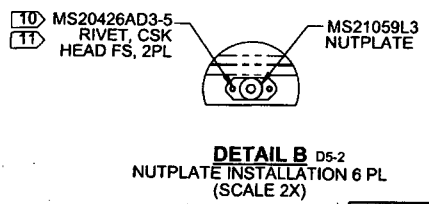
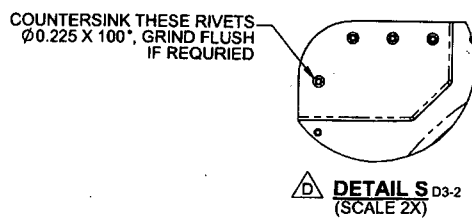
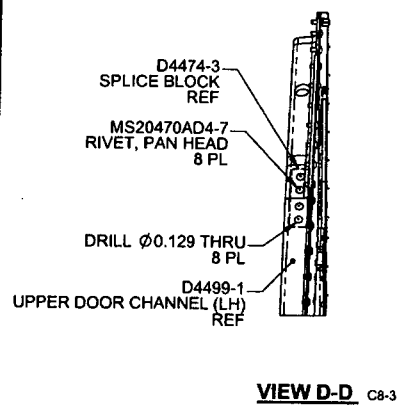
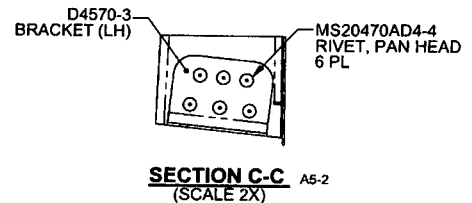
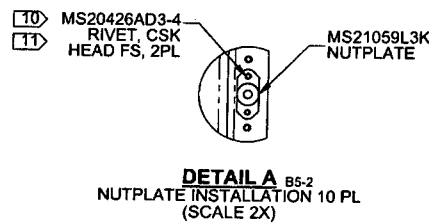
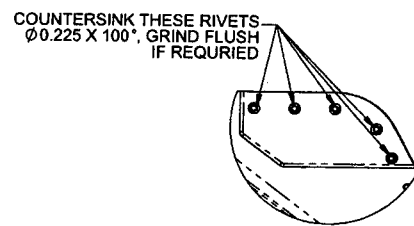
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								



RELEASED
2013-01-10



DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>AJS</i>	DRAWING NO.	REV. D
MFG. APPR.	<i>AJS</i>	D4466	SHEET 3 OF 6
APPROVED	<i>AJS</i>	TITLE	SCALE
DE APPR.	<i>AJS</i>	UPPER DOOR ASSY	NTS
DATE	12.12.03	COPYRIGHT © 2012 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE, OR COPIED OR COMMUNICATED TO ANY OTHER PERSON OR WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

DQA: _____ Date: _____



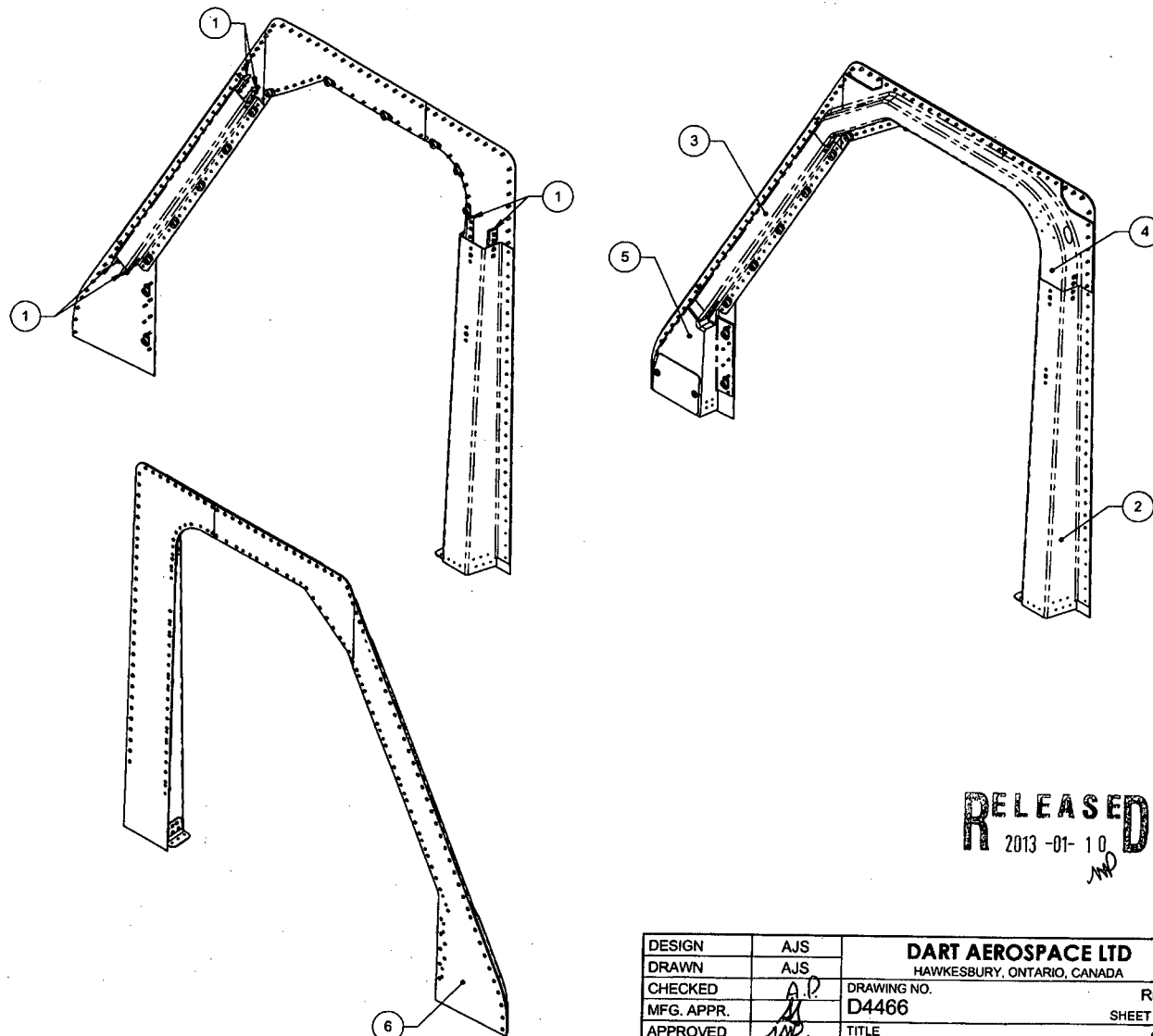
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
					QC / QA Coordinator Approval				
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐							
Misidentified ☐	Past Due ☐								

ITEM	QTY -042	P/N	DESCRIPTION
	X	D4466-042	UPPER DOOR ASSY (RH)
1	6	D4474-3	SPLICE BLOCK
2	1	D4496-042	UPPER DOOR CHANNEL ASSY (RH)
3	1	D4499-2	UPPER DOOR CHANNEL (RH)
4	1	D4500-2	BELL DOOR HEADER (RH)
5	1	D4501-042	UPPER DOOR CORNER ASSY (RH)
6	1	D4503-1	UPPER DOOR SKIN
7	1	D4570-4	BRACKET (RH)
8	16	MS20426AD3-5	RIVET, CSK
9	20	MS20426AD3-4	RIVET, CSK
10	39	MS20426AD4-3	RIVET, CSK
11	26	MS20426AD4-5	RIVET, CSK
12	42	MS20470AD4-3	RIVET, PAN HEAD
13	6	MS20470AD4-4	RIVET, PAN HEAD
14	53	MS20470AD4-5	RIVET, PAN HEAD
15	24	MS20470AD4-7	RIVET, PAN HEAD
16	8	MS21059L3	NUTPLATE
17	10	MS21059L3K	NUTPLATE



NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 4.73 lbs
- 8) INSTALL ALL RIVETS WET USING PROSEAL 890 B-2 (PRC)
- 9) SEAL ALL GAPS ON MATING PARTS USING PROSEAL 890 B-2 (PRC)
- 10) ALL RIVET HOLES TO BE TRANSFER DRILLED THRU SKIN (ITEM 6):
FOR Ø0.125 RIVETS DRILL Ø0.129
FOR Ø0.094 RIVETS DRILL Ø0.098
- 11) DIMPLE FOR COUNTERSUNK RIVETS:
FOR Ø0.125 RIVETS DIMPLE Ø0.225 X 100°
FOR Ø0.094 RIVETS DIMPLE Ø0.179 X 100°
- 12) THESE RIVETS OMITTED TO ALLOW ACCESS TO THE UNDERLYING STRUCTURE, INSTALL AT NEXT ASSEMBLY.

D4466-042 UPPER DOOR ASSY (RH)

RELEASED
2013-01-10

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	A.P.	DRAWING NO.	REV. D
MFG. APPR.		D4466	SHEET 4 OF 6
APPROVED		TITLE	SCALE
DE APPR.		UPPER DOOR ASSY	NTS
DATE	12.12.03	COPYRIGHT © 2012 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR FOR ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

DQA: _____ Date: _____

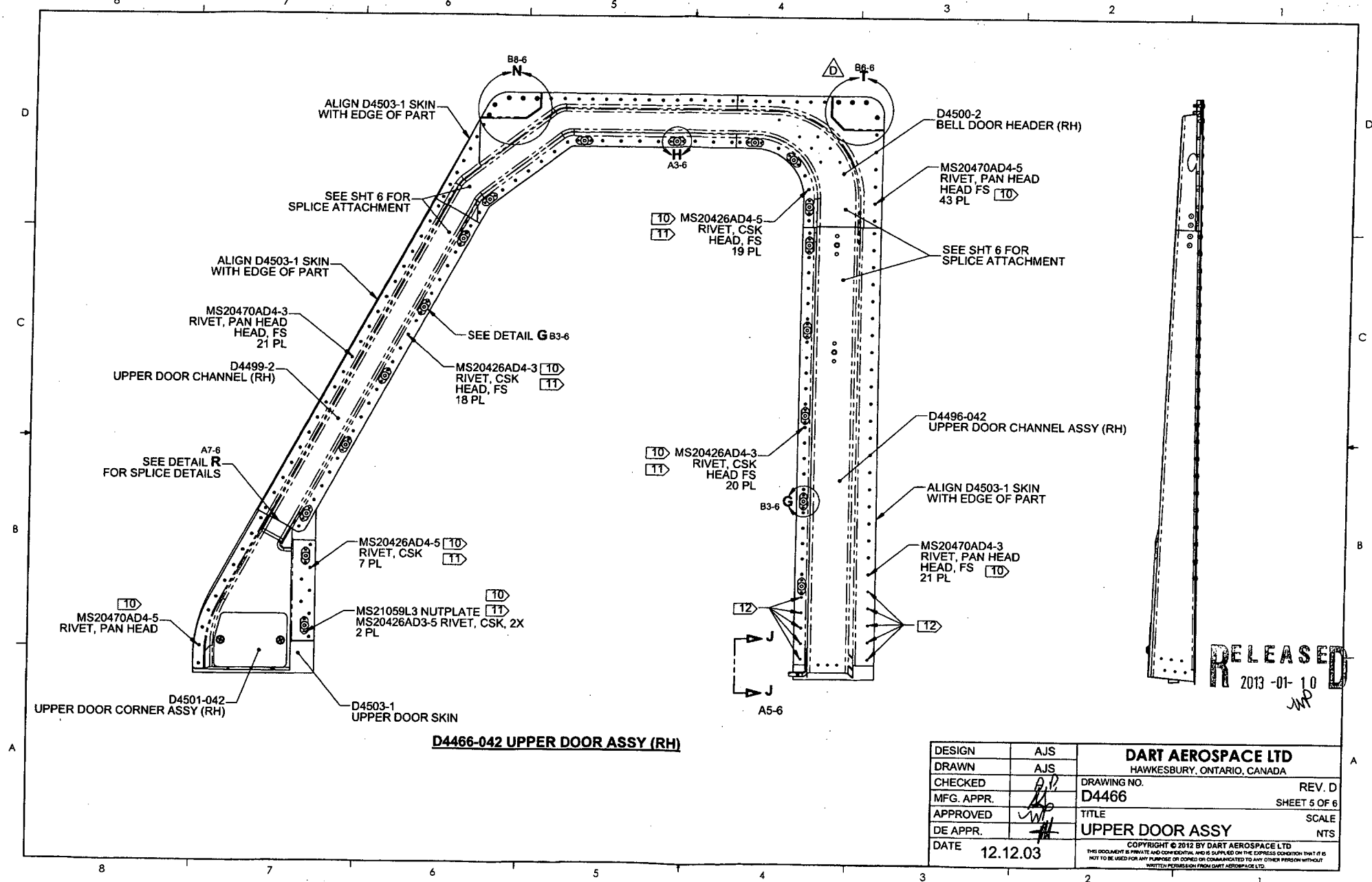


WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					



RELEASED
 2013-01-10
 JWP

DQA: _____ Date: _____

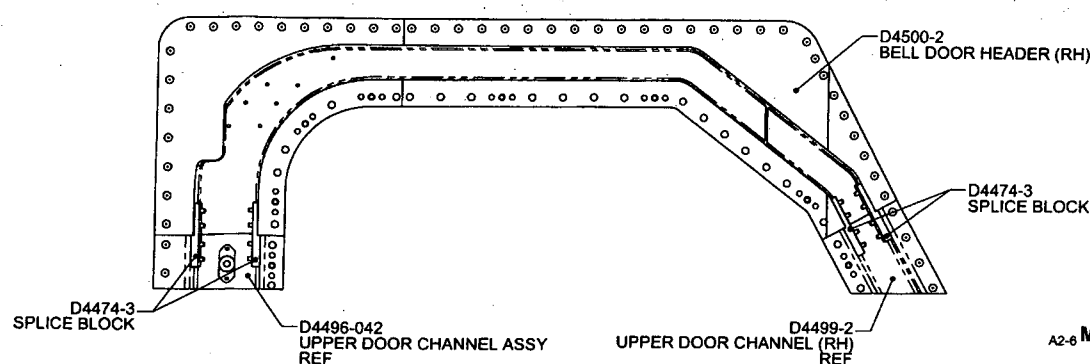
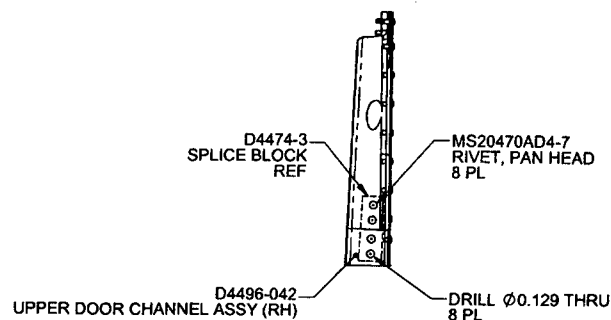


WORK ORDER NON-CONFORMANCE / UPDATE

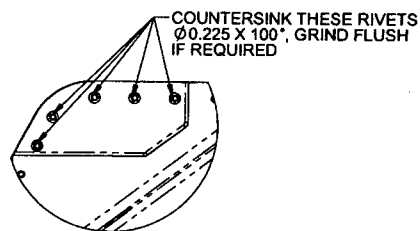
QA Closed: _____ Date: _____

Work Order update only ☐

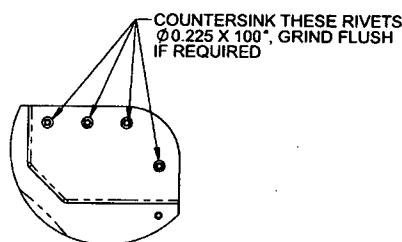
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							



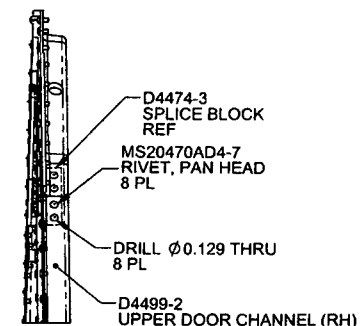
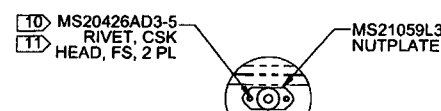
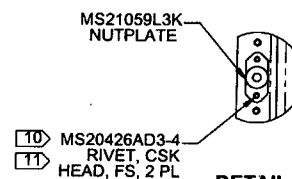
(SUPPLEMENTAL VIEW SPLICE INSTALLATION)



DETAIL N D6-5
(SCALE 2X)

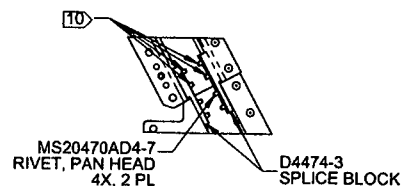


DETAIL T D3-5
(SCALE 2X)

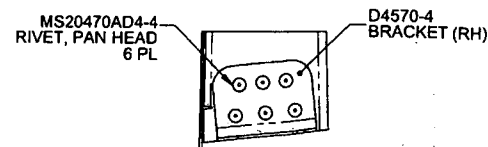


SECTION M-M C1-6

RELEASED
R 2013-01-10



DETAIL R B7-5



SECTION J-J A4-5
(SCALE 2X)

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO. D4466	REV. D
MFG. APPR.	AP	TITLE	SHEET 8 OF 8
APPROVED	AP	SCALE	NTS
DE APPR.	AP	UPPER DOOR ASSY	
DATE	12.12.03	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			

Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐				